

IN THE CLAIM

Please amend claims 1, 2, 4, 5, 8, 9, 10 - 18, and 34 - 38, as follows;

1. (Thrice Amended) A video printer, comprising:

data conversion means responsive to first data representative of successive lines of a video raster scan, for deriving second data representative of successive columns of video data extending transversely across lines of said video raster scan from said first data, said data conversion means comprising memory means for storing said first data [representative of fields of said video raster scan] at every vertical line for each color, and means for converting said first data stored in said memory means for successive fields of [the] said video raster scan[,] into [the] columns of said second data during respective [successive periods associated with the occurrence of] successive field periods of [the] said video raster scan; and

means for printing the columns of said second data successively.

2. (Thrice Amended) A video printer according to claim 1, wherein said successive [fields] field periods of [the] said video raster scan [have associated] comprise respective blanking periods, and [the columns of second] said first data are read from [the] said memory means for conversion into the columns of said second data during corresponding successive ones of [the] said blanking periods.

1 4. (Thrice Amended) A video printer according to claim 1, wherein [said raster
2 scan data represents of a color video display, and] said memory means comprises a plurality of
3 memory units for storing [signals representing corresponding] said first data in a different [colors]
4 color for each field of said video [the] raster scan [field].

1 5. (Twice Amended) A video printer according to claim 4, wherein [the] said
2 printing means [operates to print said] prints different [color representing signals] colors of said
3 second data sequentially [successively].

1 8. (Twice Amended) A video printer according to claim 5, wherein each color
2 representing said second data for [a] each field of said video raster scan stored in [the] said
3 memory means is printed during a blanking period [associated with] in a respective field period
4 of [the] said video raster scan.

1 9. (Twice Amended) A high speed color video printer, comprising:
2 means for storing digital video signals in an internal memory as video data, reading [and
3 accommodating printing of] a column unit of said video data stored in said internal memory
4 during [one field period of each blanking signal] a synchronizing and equalizing pulse period
5 within a blanking interval of a field period, and applying a field unit of said video data for a
6 visual display providing a variable visual image during a [residual period] remainder of said field
7 period that excludes said blanking interval [field period of reading and enabling printing of said

8 video data];

9 selection means for selectively providing one color of said video data from said column
10 unit of said video data read from said internal memory during said synchronizing and equalizing
11 pulse period;

12 line memory means for [enabling printing by] storing said one color of said video data
13 from said column unit of said video data provided from said selection means during said
14 synchronizing and equalizing pulse period [and then reading said video data selectively provided
15 by said selection means]; [and]

16 means for enabling printing said one color of said video data from said column unit of
17 said video data when said one color of said video data from said column unit of said video data
18 is read from said line memory means during a remainder of said field period that excludes said
19 synchronizing and equalizing pulse period; and

20 digital-to-analog converter means for [enabling said display by] converting said field
21 [units] unit of said video data into analog signals for enabling said visual display of said video
22 data.

1 10. (Twice Amended) A high speed color video printer, comprising:

2 means for providing color video data from a video signal;

3 data conversion means for storing said color video data in an internal memory [at
4 recording addresses generated by said recording address generating means in response to a
5 recording signal], and for selectively reading [the stored] said color video data [of the] stored in

6 said internal memory in columns [at printing addresses generated in said printing address
7 generating means and] corresponding to pixels of a raster scan of an interlaced video field [for
8 printing in response to a printing signal]; [and]

9 line memory means for [providing] storing said [selectively read] color video data
10 selectively read from said internal memory in columns; and

11 printer means for column-by-column printing [by storing] said [selectively read] color
12 video data selectively read from said line memory means [in columns].

1 11. (Amended) The high speed color video printer of claim 10, [wherein said]
2 further comprising printing address generating means [generates said] for generating printing
3 addresses for enabling selective reading of said color video data from said internal memory
4 during a vertical synchronizing and equalizing pulse period of a blanking interval of a first field
5 period, and enabling said printer means to print [printing of] a first of said columns of said
6 [selectively read] color video data selectively read from said internal memory during [a vertical
7 synchronizing and equalizing pulse period of a blanking interval of] a remainder of said first field
8 period that excludes said vertical synchronizing and equalizing pulse period.

1 12. (Amended) The high speed color video printer of claim 10, [wherein said]
2 further comprising printing address generating means [generates said] for generating printing
3 addresses for enabling said printer means to print [printing] a number n of said columns of said
4 [selectively read] color video data selectively read from said internal memory during [a vertical

5 synchronizing and equalizing pulse period of a blanking interval of] a number n field period,
6 where n is an integer ranging sequentially from 1 to a number of columns in a frame.

1 13. (Twice Amended) The high speed color video printer of claim 10, further
2 comprising display means for displaying said [stored] color video data selectively read from said
3 [of the] internal memory [of the data conversion means in response to a monitoring signal].

1 14. (Amended) The high speed color video printer of claim 13, wherein said data
2 conversion means further comprises monitoring address generating means for providing
3 monitoring addresses of odd rows and monitoring addresses of even rows of said color video data
4 stored in said internal memory for enabling field units of said stored color video data to be
5 displayed on said display means [by generating said monitoring addresses of said internal
6 memory].

1 15. (Twice Amended) The high speed color video printer of claim 14, wherein after
2 said data conversion means has selectively read said color video data for printing, said data
3 conversion means first provides said odd rows of an odd field of a frame of said color video data
4 to said display [displaying] means for displaying said odd rows of said odd field of said frame
5 during a remainder of an odd field period of said odd field and second provides said even rows
6 of an even field of said color video data to [the displaying] said display means during a
7 remainder of an even field period of said even field.

8 16. (Twice Amended) The high speed color video printer of claim 10, wherein said
9 internal memory comprises:

10 a first discrete memory for exclusively storing red chrominance components of said color
11 video data [in correspondence with said recording addresses];

12 a second discrete memory for exclusively storing green chrominance components of said
13 color video data [in correspondence with said recording addresses]; and

14 a third discrete memory for exclusively storing blue chrominance components of said
15 color video data [in correspondence with said recording addresses].

17. (Amended) A [high speed color video] printer, comprising:

18 means for separating a luminance component and a chrominance component of a video
19 signal;
20

21 first switching means for providing, in response to a first selection signal, a first switch
22 signal representative of one of a super video signal and said luminance and chrominance
23 components of said video signal;

24 decoding means for providing sync signals and chrominance components in response to
25 the first [switching] switch signal;

26 second switching means for providing, in response to a second selection signal, a second
27 [switching output signals] switch signal representative of one of said sync signals and said
28 chrominance components [and said sync signal] provided from the decoding means, and external
29 color and sync signals;

13 analog-to-digital converting means for providing converted chrominance components and
14 converted external color signals by converting said second switch signal;

15 data converting means for providing color video data corresponding to said one of
16 converted chrominance components and converted external color signals in response to a mode
17 signal;

18 third switching means for selectively applying said color video data to line memory means
19 in response to a third selection signal; [and]

20 [an] intermediate gradation converting [circuit] means for providing said color video data
21 of [the] said line memory means in columns to a thermal print head for printing; and

22 controlling means for generating said first, second, third selection signals and said mode
23 signal to control operation of said printer.

1 18. (Twice Amended) The printer of claim 17, further comprised of said data
2 [converter] converting means comprising:

3 internal memory means for storing said color video data[, said internal memory means
4 comprising a print output port and a display output port];

5 recording address generating means for providing recording addresses [in] for enabling
6 said internal memory means [for storing] to store said color video data on a frame-by-frame
7 basis [by generating said recording addresses] in response to a recording mode signal;

8 printing address generating means for providing printing addresses [of] for enabling said
9 color video data stored in said internal memory means [of said color video data] in columns to

10 be applied to said line memory means for printing [in columns by generating said printing
11 addresses] in response to a printing mode signal;

12 monitoring address generating means for providing monitoring addresses of odd rows and
13 monitoring addresses of even rows of said color video data for enabling said color video data
14 stored in said internal memory means to be displayed on a monitor [by generating said
15 monitoring addresses of said internal memory means] in response to a monitoring mode signal;
16 [and]

17 address selector means for selecting one of said recording addresses, said printing
18 addresses and said monitoring addresses in response respectively to one of said recording mode
19 signal, said printing mode signal and said monitoring mode signal; and

20 said controlling means controlling generation of said recording mode signal, said printing
21 mode signal, said monitoring mode signal.

1 34. (Amended) The video printer of claim 1, wherein said [deriving] data
2 conversion means further comprises: [printing address generating means,]

3 recording address generating means [and an internal memory, said deriving means] for
4 generating recording addresses enabling storing color video [data] components of said first data
5 in [the internal] said memory means; [at recording addresses generated by said recording address
6 generating means in response to a recording signal applied to said deriving means and, said]

7 printing address generating means for generating printing addresses enabling selectively
8 reading of said [stored] color video [data of the internal] components of said first data stored in

9 said memory means in said columns of said second data [at printing addresses generated in said
10 printing address generating means and corresponding to pixels of a raster scan of an interlaced
11 video field, said selective reading provided for] and enabling printing of visual images
12 representative of [said] color video components of said second data [in response to a printing
13 signal]; and

14 line memory means for providing said [selectively read] color video components of said
15 second data selectively read from said memory means for column-by-column printing by storing
16 said [selectively read] color video components of said first data in columns.

1 35. (Amended) The video printer of claim 34, wherein said printing address
2 generating means generates said printing addresses for printing of a first of said columns of [said]
3 the selectively read [color video] second data during a vertical synchronizing and equalizing pulse
4 period of a blanking interval of a first field period.

1 36. (Amended) The video printer of claim 34, wherein said printing address
2 generating means generates said printing addresses for printing a number n of said columns of
3 [said] the selectively read [color video] second data during a vertical synchronizing and
4 equalizing pulse period of a blanking interval of a number n field period, where n is an integer
5 ranging sequentially from 1 to a number of columns in a frame.

1 37. (Amended) The video printer of claim 34, wherein said [deriving] data

2 conversion means further comprises monitoring address generating means for providing
3 monitoring addresses of odd rows and monitoring addresses of even rows of said color video
4 components of said first data stored in said [internal] memory means for enabling field units of
5 said color video components of said second data selectively read from said memory means to be
6 displayed on display means [by generating said monitoring addresses of said internal memory].

1 38. (Amended) The video printer of claim 34, wherein after said [deriving] data
2 conversion means has selectively read said [color video] second data for printing, said [deriving]
3 data conversion means first provides said odd rows of an odd field of a frame of said color video
4 components of said second data to [the displaying] display means during a remainder of an odd
5 field period of said odd field for enabling a visual display of said second data on said display
6 means, and [second] then provides said even rows of an even field of said color video
7 components of said second data to [the displaying] said display means during a remainder of an
8 even field period of said even field for enabling said visual display of said second data on said
9 display means.
